



Emergency Medical Services *Partners*

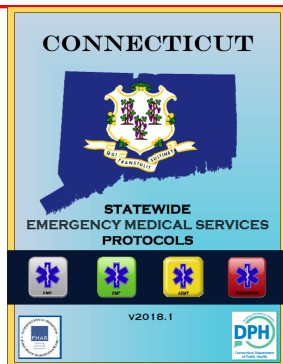
May 2018, Issue 96 (Special 2018 Statewide EMS Protocols Supplement)

uconnems.uhc.edu

2018 Connecticut Statewide EMS Treatment Protocols

The state has just released the 2018 version of the statewide EMS Treatment Protocols.

Contact your sponsor hospital for effective date. This document is designed to summarize some of the new changes.



The Updated Statewide Protocols (and summary document) are available for download at :

<http://www.portal.ct.gov/DPH/Emergency-Medical-Services/EMS/Statewide-EMS-Protocols>

Anaphylaxis (Pediatric)

- If patient <25 kg, administer 0.15 mg epinephrine IM
 - If patient >25 kg, administer 0.3 mg epinephrine IM
- Use Epi: 1:1000. Administer in thigh.



Pacing

Consider administration of the following prior to or during transcutaneous pacing, if feasible:

- Midazolam 2.5 mg IV/IO/IN, may repeat once in 5 minutes; or 5 mg IM, may repeat once in 10 minutes, OR
- Lorazepam 1 mg IV/IO, may repeat once in 5 minutes; or 2 mg IM, may repeat once in 10 minutes, OR
- alternatively, provide analgesia per Pain Management Protocol 2.19A.



Alcohol Withdrawal

For tremors, anxiety, altered mental status, hypertension, tachycardia, hallucinations or status-post seizures administer:



Lorazepam 1-2 mg IV/IO (preferred) or IM/IN, may repeat once in 5 minutes OR
Midazolam 2.5 mg IV/IO (preferred), may repeat every 5 minutes if symptoms persist OR
Midazolam 5 mg IM/IN, may repeat every 10 minutes if symptoms persist.

Pediatric Fever

For temperatures >101.5°F (38.5°C) or patient clinically feels febrile:
If acetaminophen was last taken more than 4 hours ago:



Consider administering acetaminophen 15 mg/kg PO per Pediatric Color Coded Appendix A2
If acetaminophen has been taken within the last 4 hours, but less than 15 mg/kg was administered:
Consider administering acetaminophen catch-up dose to reach total of 15 mg/kg within last 4 hours.

Post Intubation Care (Sedation)

- Midazolam 2 – 5 mg IV/IO, every 5 – 10 minutes, as needed, OR
 - Lorazepam 1 – 2 mg IV/IO, may repeat every 15 minutes as needed (maximum: 10 mg) OR
 - Ketamine 1-2 mg/kg IV/IO
- AND Consider** analgesia/potential of sedation:
- Fentanyl 1-2 micrograms/kg (max 200 micrograms), slow IV/IO push (preferred), OR
 - Morphine 2 – 5 mg, slow IV/IO push (be cautious of hypotension), OR
 - Ketamine 0.3 mg/kg IV/IO/IM

Hyperkalemia

If patient presents with clinical factors predisposing him or her to hyperkalemia (see definitions below) AND 12 lead ECG findings are consistent with moderate to severe hyperkalemia (definitions below):

Administer:

- Calcium chloride 1 gram IV over at least 5 minutes OR calcium gluconate 2 grams IV over 5 minutes
- May repeat x1 after 5 minutes.
- Nebulized albuterol (repeat continuously up to a max total of 20mg)
- Contact Direct Medical Oversight for possible additional doses of calcium.

Hyperkalemia can lead to sudden death from cardiac arrhythmias without warning. Some clinical factors predisposing patients to hyperkalemia:



- Chronic renal failure
- Acute renal failure (may be secondary to dehydration, shock, nephrotoxins, obstruction, etc.)
- Crush injury/Compartment syndrome/rhabdomyolysis

Chemical Restraints

Consider administering:

- Midazolam 5mg IM/IN or 2.5mg IV/IO, may repeat once in 5 minutes;OR
- Lorazepam 2 mg IM or 1 mg IV/IO, may repeat once in 5 minutes;



For patient with Extreme Agitation/Combativeness or suspected Excited/Agitated Delirium or ineffective control with benzodiazepines above administer:

- Ketamine (preferred) 4 mg/kg IM (round to nearest 50mg), max single dose 500mg. May administer additional 100mg ketamine IM in 5-10 minutes; OR
- If vascular access, may alternatively administer 1 mg/kg ketamine IV/IO over 2 minutes. May administer additional 0.5-1mg/kg IV/IO in 5 minutes (max total 2mg/kg); OR
- Administer benzodiazepines as authorized above AND consider: Haloperidol 10mg IM or Olanzapine 5 – 10 mg IM

Pain Management

After appropriate BLS intervention, if patient still reports pain $\geq 4/10$, paramedic should offer/discuss analgesic administration with patient regardless of vital signs or patient affect. When appropriate, analgesia should be offered prior to movement or procedures likely to worsen pain. If analgesia is withheld for moderate to severe pain, the reasons/decision-making should be documented in Patient Care Report. Unless the patient has altered mental status, consider one or a combination of the following analgesic options: Opioid Analgesia, Ketamine, NSAID, Acetaminophen.



Opioid Analgesic (Moderate/severe pain only)

Choose only ONE of the following:

Fentanyl 1 microgram/kg slow IO/IV/IM/IN (single max dose of 100 microgram), may be repeated every 5 minutes to a total of 300 micrograms titrated to pain relief, OR Morphine 0.1 mg/kg IV/IO/IM (single max dose of 10mg) every 5 minutes to a total of 20 mg titrated to pain relief and if systolic BP is >100 mmHg.

Ketamine (Moderate/severe pain only)

Ketamine 0.3 mg/kg IV/IO/IM (Max 30mg)

NSAID, Acetaminophen (mild to moderate pain)

Non-steroidal anti-inflammatory drug (NSAID - May choose only ONE of the following):

Ketorolac 15mg IV/IO/IM, OR
Ibuprofen 400mg PO

Acetaminophen (May choose only ONE of the following):

Acetaminophen 1 gram IV/IO infusion over at least 15 minutes OR Acetaminophen 1 gram PO

PEARLS

- Ketorolac and ibuprofen are contraindicated in pregnancy, renal insufficiency, peptic ulcer or in any patient with potential for bleeding/likely to need surgery. Avoid use in suspected fractures or undifferentiated abdominal pain.
- Acetaminophen is contraindicated in patients with liver failure. Do not exceed total 1 gram in 4 hours.
- Medications should be administered cautiously to the frail, debilitated, or patients over 65 years of age; administer reduced doses of opioids and/or ketamine to this population.

Important: This document provides only highlights from new protocols, please download the documents and summary available from OEMS and consult with your medical control for full instructions. (Thanks to David Bailey of HH for use of some of his materials).

CONTACT US:

Any questions or suggestions about EMS? Looking for patient follow-up?



Contact EMS Coordinator Peter Canning at canning@uchc.edu or call (860) 679-3485.